PCT/AU2003/001605

```
SEQUENCE LISTING
  <110> XENOME LTD
  <120> NOVEL CHI-CONOTOXIN PEPTIDES (-I)
  <130> 12373570/JGC
 <150> US 60/430306
  <151> 2002-12-02
 <160> 12
 <170> PatentIn version 3.1
 <210> 1
 <211> 13
 <212> PRT
 <213> Conus marmoreus
 <220>
 <221> MISC_FEATURE
 <222> (12)..(12)
 <223> X is 4-hydroxyproline
 <220>
 <221> DISULFID
 <222> (4)..(13)
 <223>
<220>
<221> DISULFID
<222>
       (5)..(10)
<223>
<400> 1
Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
<210> 2
<211> 13
<212> PRT
<213> Conus marmoreus
<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> X is 4-hydroxyproline
<220>
<221> DISULFID
```

- 2 -

```
<222> (4)..(13)
 <223>
 <220>
 <221> DISULFID
 <222> (5)..(10)
 <223>
 <400> 2
 Val Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
 <210> 3
 <211> 14
 <212> PRT
 <213> Artificial Sequence
 <220>
<223> synthetic
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> X is a pGLU or DpGlu residue
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> X is Asn or a deletion
<220>
<551> DISOPLID
<222> (5)..(14)
<223>
<220>
<221> DISULFID
<222>
      (6) . . (11)
<223>
<400> 3
Xaa Xaa Gly Val Cys Cys Gly Tyr Lys Leu Cys His Pro Cys
<210> 4
<211> 13
<212> PRT
```

. ٦ .

```
<213> Artificial Sequence
 <220>
 <223> synthetic
 <220>
 <221> misc_feature
 <222> (1)..(1)
 <223> X is pyroglutamic acid
 <220>
 <221> misc_feature
 <222> (12)..(12)
 <223> X is 4-hydroxyproline
 <220>
 <221> MOD RES
 <222> (13)..(13)
 <223> AMIDATION
 <220>
 <221> DISULFID
 <222>
       (4)..(13)
 <223>
 <220>
<221> DISULFID
<222> (5)..(10)
<223>
<400> 4
Xaa Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
               5
<210> 5
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> synthetic
<220>
<221> misc_feature
<222> (1)..(1)
<223> X is pyroglutamic acid
<220>
<221> misc_feature
```

-4-

```
<222> (12)..(12)
  <223> X is 4-hydroxyproline
 <220>
 <221> misc_feature 
<222> (13)..(13)
 <223> X is D-cysteine
 <220>
 <221> MOD_RES
 <222> (13)..(13)
<223> AMIDATION
 <220>
 <221> DISULFID
 <222> (5)..(10)
 <223>
 <400> 5
Xaa Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Xaa
                                      10
<210> .6
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> synthetic
<220>
<221> misc_feature
<222> (1)..(1)
<223> X is pyroglutamic acid
~<220>
<221> misc_feature
<222> (7)..(7)
<223> X is 4-methoxytyrosine
<220>
<221> misc_feature <222> (12)..(12).
<223> X is 4-hydroxyproline
<220>
<221> DISULFID
<222> (4)..(13)
```

- 5 -

```
.<223>
  <220>
  <221> DISULFID
  <222> (5)..(10)
  <223>
 <220>
 <221> MOD RES
 <222> (13)..(13)
 <223> AMIDATION
 <400> 6
 Xaa Gly Val Cys Cys Gly Xaa Lys Leu Cys His Xaa Cys
 <210> 7
 <211> 14
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> synthetic
 <220>
 <221> misc_feature
 <222> (1)..(1)
<223> X is pyroglutamic acid
<220>
<221> misc_feature
<222> (8)..(8)
<223> X is 4-methoxytyrosine
·<220>
<221> misc_feature
<222> (13)..(13)
<223> X is 4-hydroxyproline
<220>
<221> MOD_RES
<222> (13)..(13)
<223> AMIDATION
<220>
<221> DISULFID
<222> (5)..(14)
<223>
```

-6-

```
<220>
  <221> DISULFID
  <222>
         (6)..(11)
  <223>
  <400> 7
 Xaa Asn Gly Val Cys Cys Gly Xaa Lys Leu Cys His Xaa Cys
 <210> 8
 <211> 14
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> synthetic
 <220>
 <221> misc_feature
 <222> (1) v. (1)
 <223> X is pyroglutamic acid
 <220>
<221> misc_feature
<222> (13)..(13)
<223> X is 4-hydroxyproline
<220>
<221> MOD_RES
<222> (13)..(13)
<223> AMIDATION
<220>
<221> DISULFID
<222> (5)..(14)
<223>
<220>
<221>
        DISULFID
<222>
       (6)..(11)
<223>
<400> 8
Xaa Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
```

-7-

```
·<210> 9
    <211> 13
    <212> PRT
   <213> Artificial Sequence
   <220>
   <223> synthetic
   <220>
   <221> misc_feature
<222> (1)..(1)
<223> X is pyroglutamic acid
   <220>
   <221> misc_feature
   <222> (12)..(12)
<223> X is 4-hydroxyproline
   <220>
   <221> DISULFID
   <222> (4)..(13)
   <223>
  <220>
  <221> DISULFID
  <222> (5)..(10)
  <223>
  <400> 9
  Xaa Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
<210> 10
 <211> 13
 <212> PRT
-<213> Artificial Sequence
 <220>
 <223> synthetic
 <220>
 <221> misc_feature
 <222> (1)..(1)
 <223> X is D-pyroglutamic acid
 <220>
 <221> misc_feature
 <222> (12)..(12)
```

<223> X is 4-hydroxyproline

<223>

```
<220>
   <221>
          DISULFID
   <222>
          (4)..(13)
   <223>
   <220>
   <221>
          DISULFID
  <222>
          (5)..(10)
  <223>
  <400> 10
  Xaa Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
                                        10
  <210> 11
  <211> 13
  <212> PRT
  <213> Artificial Sequence
 <220>
 <223> synthetic
 <220>
 <221> misc_feature
<222> (1)..(1)
 <223> X is D-pyroglutamic acid
 <220>
 <221> misc_feature 
<222> (12)..(12)
 <223> X is 4-hydroxyproline
<220> ·
 <221> MOD_RES
~~222> (13)..(13)
<223> AMIDATION
<220>
<221> DISULFID
<222>
        (4) .. (13)
<223>
<220>
<221> .DISULFID
<222>
       (5)..(10)
```

-9-

```
<400> 11
    Xaa Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
    <210> 12
<211> 13
<212> PRT
<213> Artificial Sequence
    <220>
    <223> synthetic
    <220>
    <221> misc_feature
    <222> (1)..(1)
    <223> X is pyroglutamate
    <220>
    <221> misc_feature
    <222> (11)..(11)
    <223> X is D-histidine
    <220>
    <221> misc_feature <222> (12)..(12)
    <223> X is 4-hydroxyproline
    <220>
    <221> MOD_RES
   <222> (1)..(1)
    <223> AMIDATION
  . <220>
   <221> DISULPID
   <222> (4)..(13)
- -<223>
   <220>
   <221> DISULFID
   <222>
          (5)..(10)
   <400> 12
   Xaa Gly Val Cys Cys Gly Tyr Lys Leu Cys Xaa Xaa Cys
                                         10
```